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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,315	03/18/2004	Joshua Fagans	119-0028US	5571

29855 7590 10/29/2007

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EXAMINER	
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ART UNIT	PAPER NUMBER
2173	

MAIL DATE	DELIVERY MODE
10/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/803,315	FAGANS, JOSHUA	
	Examiner	Art Unit	
	Stephen Alvesteffer	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-71* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is responsive to the amendment filed August 14, 2007. Claims 1, 13-15, 43, 51-53, 61-63, and 71 are amended. Claims 1, 13, 26, 35, 43, 54, and 64 are independent claims. Claims 1-71 remain pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-6, 9-12, 43-46, 49, and 50-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller et al. (hereinafter Miller), United States Patent number 6,147,703.

Regarding claim 1, Miller teaches a method for displaying a representation of at least one image in an application program in a computer having a graphical user interface, comprising storing at least a first image data set and a second image data set for each at least one image (see column 4 lines 39-51; "*The displayed image 38 is preferably in the form of a smaller or lower resolution form of the larger, higher resolution image that is stored in the storage device 8*", the higher resolution image is equivalent to the first image data set, the lower resolution form is equivalent to the second image data set), wherein the first image data set is of a different resolution than the second image data set (see column 4 lines 39-51; "*This smaller or lower resolution*

image provides the user an indication of the image that is stored within the currently selected slot in the image list. In the case of FIG. 2, this image is displayed as a reduced size image, while in FIG. 3 it is displayed as a larger size the same size as which the image will later be displayed, but at a lower resolution"); using the stored first image data set to display the at least one image in the graphical user interface (see column 6 lines 1-8; "*The progressive display of information to the user as described provides the user the opportunity to decide to continue to scroll before enough time has passed to allow the reduced resolution or full size image to be processed. By providing this capability, the user will be able to scroll to the image they desire to review more quickly than they would if they were forced to wait for the entire image to be processed*"); and moving the at least one displayed image using the graphical user interface, and while moving, using at least the stored second image data set to display the image in the graphical user interface (see column 4 lines 52-67; "*displaying a small or low resolution representation of the image during scrolling can increase the perceived speed of scrolling*"; see also column 4 lines 39-51; "*in FIG. 3 it is displayed as a larger size the same size as which the image will later be displayed, but at a lower resolution*").

Regarding claim 2, Miller teaches that the resolution of the first image data set is higher than the resolution of the second image data set (see column 4 lines 42-45).

Regarding claim 3, Miller teaches that the resolution of the first image data set is determined in accordance with a magnification of the displayed at least one image (see column 4 lines 42-45). Images of higher resolution are displayed as larger pictures, i.e. pictures with greater magnification.

Regarding claim 4, Miller teaches moving the at least one displayed image comprises moving the at least one displayed image smoothly and continuously. When the user presses and holds a direction button, the images scroll smoothly (see column 7 lines 18-29). When the image strip reaches the end, the image strip moves continuously back to the beginning of the strip (see column 6 lines 38-43).

Regarding claim 5, Miller teaches that moving the at least one displayed image comprises scrolling (see column 5 lines 19-22).

Regarding claim 6, Miller teaches that the at least one displayed image is moved by a user interfacing with the graphical user interface (see column 6 lines 38-46).

Regarding claims 9 and 10, Miller teaches prior to storing the image data sets, processing the at least one image to form the image data sets for each at least one image; wherein the processing occurs when the at least one image is associated with the application program (see column 4 lines 10-13). Miller's invention captures real-world images, then must process the images to digitize them and store them as image data sets on the device, where it is associated with the device's previewing software.

Regarding claim 11, Miller teaches that the stored image data sets are transferred to the application program (see column 8 lines 26-42). The act of capturing the real-world images transfers the image data sets to the camera device. The application program of Miller is the device's previewing software. The image data sets are transferred to the application program when the user attempts to preview the images stored on the device.

Regarding claim 12, Miller teaches that at least one of the first and second image data sets for each at least one image comprises a full resolution version of the image (see column 5 lines 56-67). The higher resolution image of Miller is the full resolution version of the image.

Claims 43-46 and 50-53 recite a computer-readable medium with substantially the same limitations as the method of claims 1, 2, 4, 5, 12, and 9-11, respectively. Therefore, claims 43-46 and 50-53 are rejected under the same rationale.

Regarding claim 49, the images of Miller are processed and loaded by the program (see column 4 lines 52-54).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 8, 13-23, 24-42, 47, 48, 54-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (6,147,703) *supra* and Anderson, United States Patent number 6,215,523.

Regarding claim 7, Miller teaches all the limitations of claim 7 but is silent on the limitation of at least one of the first or second image data sets for each at least one image is in a memory mapped format. Anderson teaches a similar invention providing more efficient scrolling of preview images on a camera device, and also explicitly

teaches that the images are in memory mapped format (see column 14 lines 26-32). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use memory mapped format with the images because there must be a way to associate the low resolution images with the high resolution images on the device.

Regarding claim 8, Miller teaches all the limitations of claim 8, but is silent on the limitation that at least one of the first or second image data sets for each at least one image is uncompressed. Once again, Anderson teaches a similar invention, but also explicitly teaches that the lower resolution images may be uncompressed (see column 7 lines 52-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the invention of Anderson with the invention of Miller for the purpose of taking advantage of the efficiency gained in not having to decompress the images before they are displayed.

Claims 13-23 and 25 have substantially the same limitations as claims 1-12, respectively, except that claims 13-23 and 25 recite the invention as comprising at least three or more image data sets for each of a plurality of images, whereas claims 1-12 recite the invention as comprising at least a first image data set and a second image data set for each at least one image. Claims 1-12 have been established as fully anticipated by either Miller alone, or the combination of Miller and Anderson. Anderson further teaches that three image data sets are used – a thumbnail image, a screennail image, and the compressed image data (see column 7 lines 32-39; "*The image file 600 includes a header 602, compressed image data 604, a thumbnail image 606, a screennail 608, and an image tag field 610*"). Because the inventions of Anderson and

Miller are very similar, one of ordinary skill in the art at the time the invention was made would have found it obvious to combine the invention taught by Anderson with the invention taught by Miller to arrive at the instant invention as recited in claims 13-23 and 25. Furthermore, Miller suggests that a third picture of a resolution intermediate the full stored resolution and the low resolution version be displayed (see Miller column 6 lines 25-37; "*A larger resolution version 42 of the selected image is also displayed. Version 42 may be the full resolution image stored in storage 8, or may be a resolution intermediate the full stored resolution and the resolution of version 35b*").

Regarding claim 24, the combination of Anderson and Miller as discussed previously teaches all the limitations of claim 24 except that the queried image data sets for each of the plurality of images depends on a speed at which the plurality of images are moved. Miller teaches that some users may wish to scroll the images at a faster speed than the system can display the lower resolution images. Miller's solution to this problem is to allow a second, faster scrolling speed where only the image frames are shown along with a few interspersed lower resolution images (see column 7 lines 37-47). However, both of Miller's scroll speeds use the same lower resolution images. Anderson teaches the use of three different resolutions of images (see column 7 lines 32-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson with the teachings of Miller in order to handle multiple scrolling speeds when previewing the images.

Claim 26 recites a method with substantially the same limitations as claim 13, except that claim 26 recites a limitation of selecting one of a plurality of magnification

levels. Anderson teaches that the camera device has zoom features, which allows for the magnification of the images (see column 6 lines 43-47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate zoom features in digital camera device software in order to allow users to view captured images at different resolutions.

Claims 27-31 and 34 recite a method with substantially the same limitations as claims 19-23 and 25, respectively. Therefore, claims 27-31 and 34 are rejected under the same rationale.

Regarding claims 32 and 33, there can inherently be a number of magnification levels included in the camera zoom features that are either the same or different than the number of image data sets used by the camera device software.

Claim 35 recites a method with substantially the same limitations as claim 13. Therefore, claim 35 is rejected under the same rationale.

Claims 36 and 37 recite a method with substantially the same limitations as claim 19. Therefore, claims 36 and 37 are rejected under the same rationale.

Claims 38 and 39 recite a method with substantially the same limitations as claim 20. Therefore, claims 38 and 39 are rejected under the same rationale.

Regarding claims 40 and 42, the inventions of both Miller and Anderson are inherently embodied in an application program on the camera device, and the images are inherently loaded into the application program on the camera device. Anderson explicitly mentions a "computer-readable program instructions to control the operation of camera" (see column 4 lines 56-59).

Claim 41 recites a method with substantially the same limitations as claim 25 of the instant application. Therefore, claim 41 is rejected under the same rationale.

Claims 47 and 48 recite a computer-readable medium with substantially the same limitations as claims 7 and 8. Therefore, claims 47 and 48 are rejected under the same rationale.

Claims 54-63 recite a computer-readable medium with substantially the same limitations as claims 26-28, 40, 32-34, and 29-31, respectively. Therefore, claims 54-63 are rejected under the same grounds.

Claims 64-71 recite a computer-readable medium with substantially the same limitations as claims 35-42. Therefore, claims 64-71 are rejected under the same grounds.

Response to Arguments

Applicant asserts that Miller does not teach or suggest the limitations of (i) displaying an image using a first image data set, (ii) moving the displayed image, and (iii) using a second image data set to display the displayed image when the displayed image is moved. The examiner respectfully disagrees.

While Miller does teach in one embodiment displaying a series of pictures in an index 28 at a low resolution, and ***separately*** displaying a larger picture on the screen 14, in a different embodiment Miller further teaches moving ***the same*** picture at a lower resolution to increase the perceived speed of scrolling (see column 4 lines 52-67; "*displaying a small or low resolution representation of the image during scrolling can*

increase the perceived speed of scrolling"; see also column 4 lines 39-51; "*in FIG. 3 it is displayed as a larger size the same size as which the image will later be displayed, but at a lower resolution*"). Thus, Miller teaches (i) displaying an image using a first image data set (the higher resolution image when the picture strip is not scrolling), (ii) moving the displayed image (scrolling the picture strip), and (iii) using a second image data set to display the displayed image when the displayed image is moved (displaying as a larger size the same size as which the image will later be displayed, but at a lower resolution).

Applicant further asserts that the concept of moving the image as required by claim 1 is not taught or suggested by Miller. The examiner respectfully disagrees.

Applicant is again directed to column 4 lines 52-67, "*displaying a small or low resolution representation of the image during scrolling can increase the perceived speed of scrolling*", and column 4 lines 39-51; "*in FIG. 3 it is displayed as a larger size the same size as which the image will later be displayed, but at a lower resolution*", "it" referring to item 38 of Figure 3. The act of scrolling is interpreted as a form of movement.

Applicant asserts that Miller does not teach or suggest the limitations of (i) using a first image data set to display a plurality of images, (ii) moving the plurality of displayed images, and (iii) while moving the plurality of displayed images, querying an

image data set different from the first image data set (i.e., another image data set) to display the plurality of displayed images. The examiner respectfully disagrees.

As shown previously, Miller does teach an embodiment (the embodiment shown in Figure 3) in which lower resolution versions of images are shown while they are scrolling. Furthermore, Miller teaches that a plurality of pictures in a picture strip is scrolled.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- **Nobuoka et al.**, United States Patent number 6,031,569, teaches displaying images in high resolution when they are not moving, and in low resolution when moving.
- **Itoh et al.**, United States Patent number 6,452,579, teaches displaying moving images using fewer bits to lower the resolution of the moving images.
- **Wolff et al.**, United States Patent number 6,833,848, teaches rendering low resolution versions of thumbnail images while they are being scrolled.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Alvesteffer whose telephone number is (571) 270-1295. The examiner can normally be reached on Monday-Friday 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571)272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stephen Alvesteffer
Examiner
Art Unit 2173

10-22-2007

JOHN CABECA
SUPERVISORY PATENT EXAMINER
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